Listing of Claims

This listing of claims will replace all prior versions and listings of claims in the application.

1. (currently amended) A method for discovery of cooperating nodes in a network of nodes in which each cooperating node has information about at least one other cooperating node, comprising performing, by each cooperating node in the network of nodes, the steps of:

(a) storing in each cooperating node, cooperating node information available to that node;

([[a]]b) randomly or pseudorandomly selecting, by each first cooperating node, from the cooperating node information available to the first cooperating node, only one second cooperating node;

([[b]]c) transmitting from the first cooperating node to the second cooperating node at least a portion of the stored cooperating node information available to the first node;

([[c]]d) periodically repeating steps ([[a]]b) and ([[b]]c);

whereby cooperating nodes in the network of nodes are discovered and stored cooperating node information is updated.

2. (currently amended) The method of claim 1 wherein step ([[a]]b) ~~comprises~~ consists of randomly selecting, by the first node, from cooperating node information available to the first node, the second node.

3. (currently amended) The method of claim 1 wherein step ([[a]]b) ~~comprises~~ consists of pseudo-randomly selecting, by the first node, from cooperating node information available to the first node, the second node.

4. (cancelled).

5. (cancelled).

6. (currently amended) The method of claim 1 wherein step ([[b]]c) further comprises transmitting from the first node to the second node at least a portion of the cooperating node information available to the first node, said cooperating node information comprising a list of cooperating nodes and resources available at each listed cooperating node.

7. (currently amended) The method of claim l wherein step ([[b]]c) comprises transmitting from the first node to the second node all of the first node's cooperating node information.

8. (cancelled).

9. (cancelled).

10. (cancelled).

11. (currently amended) The method of claim 1 further comprising, after step ([[b]]c) and prior to step ([[c]]d), the steps of:

([[b]]c1) merging, by the second node, the cooperating node information transmitted by the first node with cooperating node information available to the second node;

and wherein step ([[c]]d) comprises periodically repeating steps ([[a]]b), ([[b]]c), and ([[b]]c1).

12. (currently amended) The method of claim 1 further comprising, after step ([[b]]c) and prior to step ([[c]]d), the steps of:

([[b]]c1) requesting, by the first node, from the second node, at least a portion of the stored cooperating node information available to the second node;

([[b]]c2) receiving, by the first node, from the second node, at least a portion of the stored cooperating node information available to the second node;

and wherein step ([[c]]d) comprises periodically repeating steps ([[a]]b), ([[b]]c), ([[b]]c1), and ([[b]]c2).

13. (currently amended) The method of claim 1 further comprising, after step ([[b]]c) and prior to step ([[c]]d), the steps of:

([[b]]c1) merging, by the second node, the cooperating node information transmitted by the first node with cooperating node information available to the second node;

([[b]]c2) requesting, by the first node, from the second cooperating node, at least a portion of the cooperating node information available to the second node;

([[b]]c3) receiving, by the first node, from the second cooperating node, at least a portion of the cooperating node information available to the second node;

([[b]]c4) merging, by the first node, the cooperating node information received from the second node with cooperating node information available to the first node;

and wherein step ([[c]]d) comprises periodically repeating steps ([[a]]b), ([[b]]c), ([[b]]c1), ([[b]]c2), ([[b]]c3), and ([[b]]c4).

14. (previously presented) A system of cooperating nodes in which each cooperating node can discover information about the other cooperating nodes, comprising network nodes, wherein each of the said network nodes comprises:

a selector for randomly or pseudorandomly selecting, from cooperating node information available to the node, only one second cooperating node;

a transmitter for transmitting from the cooperating node to the second cooperating node at least a portion of the cooperating node information available to the node; and

a timer control for periodically triggering the selector and the transmitter;

whereby operation of the system enables each cooperating node to discover all cooperating nodes in the network.

15. (currently amended) A method for discovery of cooperating nodes in a network of nodes in which each cooperating node has information about at least one other cooperating node, comprising performing, by each cooperating node in the network of nodes, the steps of:

(a) randomly or pseudorandomly selecting, by each first cooperating node, from cooperating node information available to the first cooperating node, only one second cooperating node;

(b) requesting, by the first cooperating node, from the second cooperating node, at least a portion of the cooperating node information available to the second node;

(c) receiving, by the first cooperating node, from the second cooperating node, at least a portion of the cooperating node information available to the second node;

(d) storing, by the first cooperating node, in a data store, the received cooperating node information;

([[d]]e) periodically repeating steps (a), (b), [[and]] (c), and (d);

whereby all cooperating nodes in the network of nodes are discovered.

16. (currently amended) The method of claim 15 wherein step (a) ~~comprises~~ consists of randomly selecting, by the first node, from cooperating node information available to the first node, the second cooperating node.

17. (currently amended) The method of claim 15 wherein step (a) ~~comprises~~ consists of pseudo-randomly selecting, by the first node, from cooperating node information available to the first node, the second node.

18. (cancelled).

19. (cancelled).

20. (previously presented) The method of claim 15 wherein step (b) further comprises requesting, by the first node, from the second node, at least a portion of the cooperating node information available to the second node, said cooperating node information comprising a list of cooperating nodes and resources available at each listed cooperating node.

21. (previously presented) The method of claim 15 wherein step (b) comprises requesting, by the first node, from the second node, all of the second node's cooperating node information.

22. (cancelled)

23. (cancelled)

24. (cancelled)

25. (currently amended) The method of claim 15 further comprising, after step (c) and prior to step ([[d]]e), the step of:

(c1) merging, by the first node, the received cooperating node information with cooperating node information available to the first node;

and wherein step ([[d]]e) comprises periodically repeating steps (a), (b), (c1), [[and]] (c), and (d).

26. (currently amended) The method of claim 15, further comprising, before step ([[d]]e) the step of:

(aa) transmitting from the first node to the second node, at least a portion of the cooperating node information available to the first node;

and wherein step ([[d]]e) comprises periodically repeating steps (aa), (a), (b), [[and]] (c) and (d).

27. (currently amended) The method of claim 26 further comprising, after step (aa), but before step ([[d]]e), the step of:

(bb) merging, by the second node, the cooperating node information transmitted by the first node with cooperating node information available to the second node;

and wherein step ([[d]]e) comprises periodically repeating steps (aa), (bb), (a), (b), [[and]] (c) and (d).